



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of  
GILBERT P. HYATT  
Serial No. 06/848,017  
Docket No. 307  
Filed: April 3, 1986  
For: SIGNATURE COMMUNICATION  
SYSTEM

Group Art Unit 222

Examiner: Ian J. Lobo

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GROUP 220

PRELIMINARY AMENDMENT

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

I REMARKS

1.1 REFERENCES CITED BY THE APPLICANT

Copies of the references were provided in ancestor and related patent applications. For example, copies of the references were recently provided in related patent application Serial No. 06/849,243 with the Amendment filed on or about October 22, 1989.

The cited references are pertinent because they were considered by the Examiners in related filtering patent applications. Further, pertinence of many of the references is set forth below.

In addition, **the same Examiner has already considered much of this art** in related application Serial No. 07/084,718 which is now Patent No. 4,944,036.

Patent No. 2,624,876 to Dicke discloses filtering and display in a radar system.

Patent No. 2,678,997 to Darlington discloses a signature signal system.

Patent No. 2,688,124 to Doty et al discloses a signature signal system having a meter display.

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Patent No. 2,760,164 to Graham et al discloses signal delay circuits.

Patent No. 2,808,577 to Crawford et al discloses a signature signal system.

Patent No. 2,874,795 to Doty et al discloses multipath signal processing having a recorder display.

Patent No. 2,910,134 to Crawford et al discloses a seismic signal generator.

Patent No. 3,018,962 to Jones et al discloses correlation filter processing having a readout.

Patent No. 3,024,994 to Baland et al discloses a correlation filter processor having a display.

Patent No. 3,033,453 to Lode discloses filter processors.

Patent No. 3,065,453 to Doty discloses filter processing and compositing having a recorder display.

Patent No. 3,197,621 to Urquhard discloses a computer that is suitable for filter processing having A/D and D/A converters.

Patent No. 3,444,360 to Swan discloses A/D, D/A, and multiplier circuits with an indicator display.

Patent No. 3,446,949 to Trimble discloses a signal processing system having A/D and D/A converters and a scope display.

Patent No. 3,479,495 to Malm discloses a correlation filter.

Patent No. 3,496,529 to Anstey et al discloses a seismic filtering system with a display.

Patent No. 3,514,757 to Weintraub discloses a computer suitable for signal processing.

Patent No. 3,521,170 to Leuthold et al discloses a filter system having A/D converters.

Patent No. 3,544,775 to Bergland et al discloses a Fourier processor.

Patent No. 3,573,622 to Holzman et al discloses a signal processing system.

Patent No. 3,581,078 to Robertson discloses a Fourier transform processor.

Patent No. 3,614,626 to Dillard discloses a radar signal processor having an A/D converter.

Patent No. 3,629,509 to Glaser discloses a digital filter processor.

Patent No. 3,629,800 to Schneider discloses a convolution filter processor with a recorder display.

Patent No. 3,633,170 to Jones discloses a filter processor.

Patent No. 3,701,894 to Low et al discloses a PCM signal processor having an A/D converter.

Patent No. 3,715,666 to Mueller discloses a correlator filter processor.

Patent No. 3,731,268 to Landrum, Jr. discloses a correlation signal processor with a display.

Patent No. 3,732,409 to Fletcher et al discloses a digital filtering system.

Patent No. 3,735,269 to Jackson discloses a digital signal processor having a ROM and a D/A converter.

Patent No. 3,767,907 to Radcliffe, Jr. discloses a correlation filter processor having a display.

Patent No. 3,772,681 to Skingle discloses a processor having a D/A converter and a filter processor.

Patent No. 3,777,133 to Beck et al discloses a correlation filter processor and a display.

Patent No. 3,789,199 to Kotwicki discloses a D/A converter and a filter.

Patent No. 3,875,394 to Shapely discloses a correlation filter processor.

Patent No. 3,894,219 to Weigel discloses a filter processor having a D/A converter.

Patent No. 3,903,401 to Jayant discloses a transform processor.

Patent No. 3,906,400 to Gooding et al discloses single bit filter processing.

Patent No. 3,935,439 to Buss et al discloses a convolution filter processor.

Patent No. 3,949,206 to Edwards et al discloses a filter processor having A/D and D/A converters.

Patent No. 4,013,998 to Bucciarelli et al discloses a radar signal processing system.

Patent No. 4,037,159 to Martin discloses a signature signal processing system having an A/D converter.

Patent No. 4,209,843; Patent No. 4,486,850; Patent No. 4,491,930; Patent No. 4,551,816; Patent No. 4,553,221; Patent No. 4,581,715; Patent No. 4,686,655; and Patent No. 4,553,213 all to Hyatt are related patents of the Applicant having substantially the same disclosure as in the instant application and having claims relating to filtering and filter displays.

The article Charge Coupled Devices and Applications by Carnes and Kosonocky teaches CCD principles.

The article Charge-Coupled Semiconductor Devices by Boyle and Smith teaches CCD principles.

The article Correlation Techniques - A Review by Anstey teaches correlation filtering principles.

The article A Current Distribution for Broadside Arrays Which Optimizes the Relationship Between Beam Width and Side-Lobe Level by Dolph teaches filtering principles.

The article Designers Guide to Digital Filters by Leon and Bass teaches digital filtering principles.

The article A Digital Correlator Using Delta Modulation by Nakamura teaches correlation filter principles including use of an A/D converter.

The article The Effect of Harmonic Surface Sources by Sheriff et al teaches seismic filtering principles.

The article Experimental Verification of the Charge Coupled Device Concept by Amelio teaches CCD principles.

The article The Spectrum of Clipped Noise by Van Vleck and Middleton teaches filtering, signal noise, and single bit signal processing principles.

The article The Theory and Design of Chirp Radars by Klauder teaches filtering principles.

The book Analog Computers by Korn and Korn teaches analog computer principles.

The book Design of Real-Time Computer Systems by Martin teaches real time computer principles.

The book Digital Computer Design by Braun teaches digital computer principles.

The book Digital Computer Design Fundamentals by Chu teaches digital computer principles.

The book Digital Computer Programming by Stark teaches computer programming principles.

The book Digital Signal Processing by Oppenheimer and Schafer teaches signal processing principles.

The book Digital Signal Processing by Robiner and Radner teaches signal processing principles.

The book Elements of Computer Programming by Swallow and Price teaches computer programming principles.

The book Encyclopedic Dictionary of Exploration Geophysics by Sheriff teaches seismic exploration and filtering principles.

The book The Fast Fourier Transform and Its Implementation by Butler and Harvey teaches Fourier transform principles.

The book Fundamentals of Flowcharting by Schriber teaches computer programming principles.

The book IBM 360 Programming and Computing by Golden and Leichus teaches computer programming principles.

The book Junction Transistor Electronics by Hurley teaches transistor circuit principles.

The book Methods For Solving Engineering Problems Using Analog Computers by Levine teaches hybrid computer principles and teaches engineering methodologies.

The book Programming, An Introduction To Computer Languages by Maurer teaches computer programming principles.

The book Programming and Coding Digital Computers by Sherman teaches computer programming principles.

The book Programming For Digital Computers by Jeenel teaches computer programming principles.

The book The Robinson Treitel Reader by Seismograph Service Corp. teaches seismic and filtering principles.

The book Seismic Filtering by Rothenburg and Van Nostrand teaches seismic and filtering principles.

The book The TTL Data Book by Texas Instruments, Inc. teaches digital circuit principles.

The book Proceedings of the IRE on Waves and Electronics teaches signal processing principles.

#### 1.2 RELATED PATENT APPLICATIONS

The Examiner is requested to take notice of the proceedings in related patent applications, as discussed below.

Patent application Serial No. 05/860,253 and Serial No. 07/209,115 (now Patent No. 4,942,516) are primarily related to a single chip computer. The prosecution and appeal in patent application Serial No. 05/860,253 is discussed in the record of patent application Serial No. 07/209,115. A copy of Patent No. 4,942,516 is transmitted herewith.

The following information was before the Examiner in ancestor application Serial No. 05/402,520.

An appeal in parent application Serial No. 101,881 and the litigation Mattel, Inc. v. Hyatt, 206 USPQ 499 (C.D. Cal. 1979), aff'd, 664 F.2d 757, 212 USPQ 808 (9th Cir. 1981) are of-record in said ancestor application. See the response to the Requirement For Information and the Mattel v. Hyatt court decisions therein. This appeal was primarily related to a micro computer arrangement and did not involve filter processors. This litigation was primarily related to a computerized sound system and a softwired display refresh arrangement and did not involve filter processors.

An on-sale issue was introduced in said litigation. Extensive materials related thereto were submitted in parent application Serial No. 05/402,520; which materials are herein incorporated by reference. This on-sale issue was primarily related to a softwired keyboard and a softwired display refresh arrangement and did not involve filter processors.

In appeals in related applications Serial No. 05/101,881; Serial No. 05/849,733; Serial No. 05/849,812; Serial No. 05/860,253; and Serial No. 05/860,259 the Board affirmed in part or in whole the Examiner's rejections and the CAFC affirmed the Board's decision.

In appeals in related applications Serial No. 05/860,260; Serial No. 05/948,378; Serial No. 05/950,755; and Serial No. 06/191,873 the Board affirmed the Examiner's rejections. Related applications Serial No. 05/948,378 and Serial No. 06/191,873 were primarily related to A/D and D/A converters and did not involve filter processors.

### 1.3 TELEPHONE CONFERENCE RECORD

The Applicant telephoned the Examiner on March 17, 1989 to inquire about the status of the instant application. The Examiner said that examination was being delayed because he was not able to get the file wrapper in a parent case.

The Applicant telephoned the Examiner on October 24, 1989 to inquire about the status of the instant application. The Examiner said that he had not as yet examined the instant application and that the instant application might be reassigned to another examiner.

The Applicant telephoned the Examiner on July 25, 1990 to inquire about the status of the instant application and to ask the Examiner if filing of a preliminary amendment would be appropriate. The Examiner said that he had not as yet examined the application and that there was ample time for the Applicant to file a preliminary amendment. The Examiner said that the instant application was listed on his docket but that it would probably be assigned to another Examiner. The Examiner said that he would investigate the matter and would try to get the instant application examined.

1.4 DECLARATION

A Declaration is transmitted herewith in replacement for the Declaration previously filed. The new Declaration is in a form preferred by the PTO.

1.5 REMARKS ON AMENDMENTS TO THE SPECIFICATION

The amendments to the specification do not introduce new matter and hence should be entered as proposed.

The amendments to pages 1B to 1D update the status of the ancestor patent applications, make minor editing changes, and add two additional ancestor applications (ancestor application Nos. 30 and 31 therein). Adding of ancestor applications by amendment is in accordance with 35 USC 120.

The amendment to page 10A inserts a paragraph on coupling and connection. This amendment has been entered by the same Examiner in related application Serial No. 07/084,718.

The other amendments make editing type corrections. These amendments have been entered by the same Examiner in related application Serial No. 07/084,718.